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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/531,102	04/11/2005	Akinori Nishihara	60562.00006	2155
32294 7590 08/13/2008 SQUIRE, SANDERS & DEMPSEY L.L.P. 8000 TOWERS CRESCENT DRIVE 14TH FLOOR VIENNA, VA 22182-6212				
EXAMINER				
GUILL, RUSSELL				
ART UNIT		PAPER NUMBER		
2123				
MAIL DATE		DELIVERY MODE		
08/13/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/531,102

Applicant(s)

NISHIHARA ET AL.

Examiner

Russ Guill

Art Unit

2123

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 June 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CD/CD)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

1. This Office Action is in response to a Request for Continued Examination filed June 19, 2008. Claims 1 – 2 were canceled. Claim 3 is pending. Claim 3 has been examined. Claim 3 has been rejected.
2. **The Examiner would like to thank the Applicant for the very well-presented amendment, which was useful in the examination process. The Examiner appreciates the effort to carefully consider the Office Action, and make appropriate arguments and amendments.**

Response to Remarks

3. Regarding claims 1 – 2, Applicant's arguments are persuasive. The claims have been canceled, and thus the rejections are moot.
4. Regarding claim 3 rejected under 35 USC § 101:
 - a. Applicant's arguments have been fully considered, but are not persuasive, as discussed below.
 - b. The Applicant argues:
 - c. Applicants respectfully submit that claim 3 recites "a FIR filter design apparatus," and that a FIR filter design apparatus is a machine which is a category of patentable subject matter. Applicants further submit that a FIR filter design apparatus inherently produces a useful, concrete, and tangible result (i.e. the smoothing and processing of digital data), and thus, is not an abstract idea.
 - i. The Examiner respectfully replies:
 - ii. The claim is directed to a finite impulse response filter design apparatus, but the claim does not appear to define an apparatus. A machine is defined by its structure, but the claim does not appear to recite

any structure. While the preamble mentions a computer, the preamble does not have any patentable weight. It is assumed that the preamble language is duplicative of the language found in the body of the claims or merely provides context for the claims.

iii. Further, the claim must produce either a physical transformation or have a practical application having a concrete, useful and tangible result. The program does not appear to produce a tangible result to support a practical application, and the specification does not appear to recite a practical application. Regarding the recited practical application, “the smoothing and processing of digital data”, the process of smoothing does not appear to be recited in the specification, and “processing of digital data” does not appear to be inherently a useful, concrete and tangible result, or an inherently practical application.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

a. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

i. Regarding claim 3, the claim recites in line 7, “ $z=-1$ ” and “ $z=1$ ”. The meaning of the term “ z ” is undefined, and thus is unclear. While the claims are interpreted in light of the specification, limitations from the

specification are not imported into the claims. The metes and bounds of the claim cannot be determined.

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claim 3 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

a. Regarding claim 3:

i. The claim is directed to a finite impulse response filter design apparatus, but the claim does not appear to define an apparatus. A machine is defined by its structure, but the claim does not appear to recite any structure, and thus the claim is non-statutory. While the preamble mentions a computer, the preamble does not have any patentable weight. It is assumed that the preamble language is duplicative of the language found in the body of the claims or merely provides context for the claims.

ii. Further, the claim must produce either a physical transformation or have a practical application having a concrete, useful and tangible result. The program does not appear to produce a tangible result to support a practical application, and the specification does not appear to recite a practical application.

iii. The claim appears to recite merely abstract steps of a mathematical algorithm. Further, the claims appear to claim every substantial practical application of the abstract steps (preempt) because the result of extracting

array elements appears to be so broad as to encompass all substantial practical applications of the algorithm.

Allowable Subject Matter

8. Any indication of allowability is withheld pending resolution of the outstanding rejections.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Russ Guill whose telephone number is 571-272-7955. The examiner can normally be reached on Monday – Friday 9:30 AM – 6:00 PM.

10. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Rodriguez can be reached on 571-272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Any inquiry of a general nature or relating to the status of this application should be directed to the TC2100 Group Receptionist: 571-272-2100.

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Russ Guill
Examiner
Art Unit 2123

RG

/Paul L. Rodriguez/
Supervisory Patent Examiner,
Art Unit 2123

